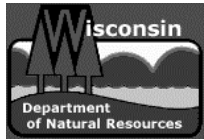


# DRAFT

## NR 445 Coal Dust Proposal

April 16, 2002

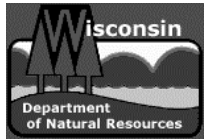
**Jeff Myers**, 608-266-2879  
myersj @dnr.state.wi.us  
Bureau of Air Management



# Why We Are Here

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- **ACGIH Revised TLV 2000, resulting in Ambient Air Concentration (AAC) of 21.6 ug/M3 bituminous & 9.6 ug/M3 anthracite**
- **Evaluated NR 415 (Fugitive Dust Rule), but no guarantee AAC will be met**
- **Monitoring results show exceedance of AAC has occurred at a coal handling facility.**



# PM<sub>10</sub> Monitoring Results

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- **Proposed Bituminous Standard 21.6 ug/M3 - 24 hr average**
- **Site Name: Great Lake Research Station – Milwaukee**
- **Site #: 55-079-0064**

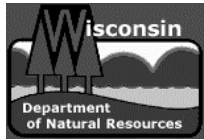
Sampling Date	Filter Number	Particulate Conc. (ug/M3)	Hours downwind of coal source	Follow-up Analysis	Percent Coal	Ambient Coal Conc. (ug/M3)
12/02/1999	7538200	37	21	Y	27	10.0
03/31/2000	9056523	50.2	6	Y	54	<b>27.1</b>
08/22/2000	9056799	34.0	9	Y	34	11.6
10/15/1999	7538062	60.3	16	Y	42	<b>25.3</b>
03/31/1999	7662106	240.0	7	Y	62	<b>148.8</b>



# Compliance Demonstration Options

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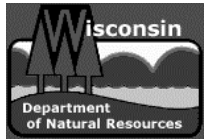
- **Model Demonstration of AAC**
- **Single Source Monitoring**
- **Sector Source Monitoring**



# In all Options

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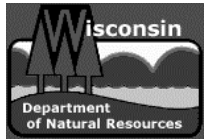
- **Follow Department Guidance**
- **Complete compliance demonstration no later than 36 months after rule effective date**
- **Include as conditions in the permit those activities, etc. that were used to demonstrate compliance**
  - **(Use of fugitive dust control and activity level that shows attainment must be placed into permit. (e.g., if assumption that no more than 1 ship being unloaded or loaded at a time, then that condition is placed in permit)).**



# Dispersion Modeling Option

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- **Use Department Guidance**
- **Examples of Parameters**
  - **Meteorological data (wind speed, direction)**
  - **Particle Size Distribution**
  - **Height of Pile**
  - **Activity level of unloading, loading, etc.**
  - **Dust control measures & moisture content of coal**
  - **Vehicle miles traveled, size, weight**
- **Include those as conditions in permit**

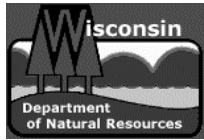


# Monitoring: Single Source Option

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- **Department Guidance**
  - **2 PM10 monitors**
  - **Placement of monitors -- public exposure and wind direction**
  - **Sample Criteria - analysis for coal dust if  $> 45 \text{ ug/M}^3$**
- **Operate monitors until they show  $\geq 18$  months of compliance at location where public may be exposed.\***
- **Include operating conditions in permit**
- **Sources not meeting this will have to take additional conditions to limit fugitive dusts and continue monitoring.**

*\*Note: Monitored values  $>$  std. before 36 months are not violations*

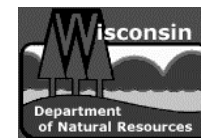


# Sector Monitoring Study

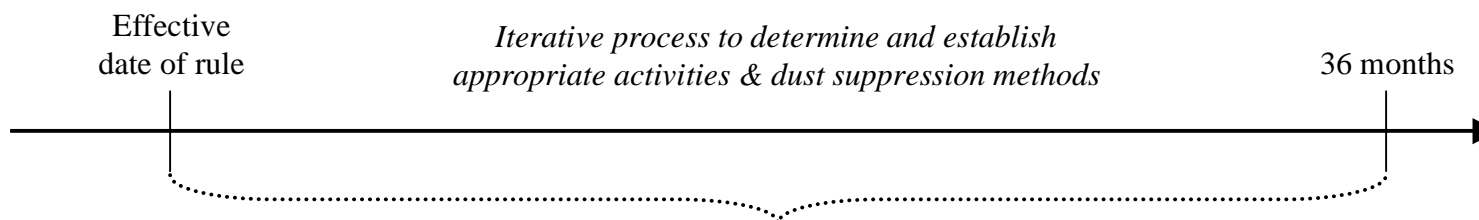
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- If sectors want to develop monitoring study for representative facilities, they may do so.
- Those fugitive dust control measures will be applied to all sources in that sector that wish to use them.
- Early start is essential to meet 36 month time frame:
  - 12 months to organize group, design study and set up monitors and record-keeping procedures
  - 24 months of monitoring data
  - 6 months to analyze monitoring data and management practices in order to develop sector specific management practices that will meet standard.
- Same monitoring guidance as for single source monitoring



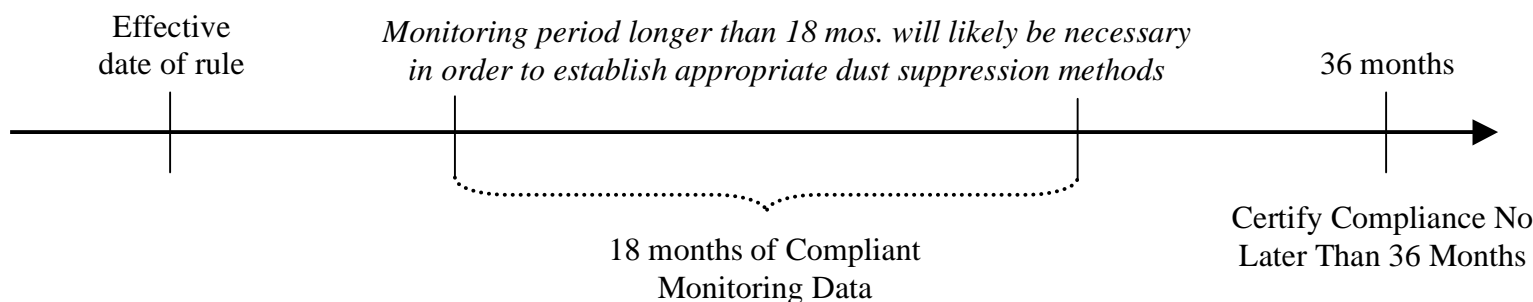


## A. Dispersion Model



Certify Compliance Using Dispersion Model No Later Than 36 Months

## B. Single Source Monitoring



## C. Sector Monitoring Study

